IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants	: Kazutoshi YASUNAGA et al.	Group Art Unit : 2641	
Appl. No.	: 10/614,834	Examiner : Not Yet Assigned	
Filed	: July 9, 2003	Confirmation No. : 8124	
For	: SPEECH CODER AND SPEECH DECODER		

PETITION PURSUANT TO M.P.E.P. § '708.02(VIII) FOR
ACCELERATED EXAMINATION

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window, Mail Stop <u>AMENDMENT</u>
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir :

Applicants petition to accelerate examination of the above-captioned application

pursuant to 37 C.F.R. § 1.102, and submit herewith the following information, in

accordance with the requirements set forth in M.P.E.P. § 708.02, Section VIII:

(A) This Petition is accompanied by the required fee set forth in 37 C.F.R. §

1.17(h).

(B) The application, as amended concurrently herewith, includes fifteen (15)

claims, labeled claims 2-16, three of which are presented in independent form (claims 2,

7 and 12). Applicants submit that claims 2-16 are directed to a single invention.

However, in the event that the U.S. Patent and Trademark Office determines that all the

claims presented are not obviously directed to a single invention, Applicants agree to make an election without traverse.

(C) A search was performed by the U.S. Patent and Trademark Office in Patent Application No. 10/133,735, which is now U.S. Patent No. 7,024,356. The present application is a continuing application of the above-noted application. The search by the U.S. Patent Examiner in U.S. Patent No. 7,024,356 satisfies the requirement for a pre-examination search because the pending claims of the present application, as amended contemporaneously herewith, are the same or similar in scope to the claims in the above-noted parent application. The search in the parent application includes class 704, subclasses 223, 219, 222, 220, 201, 224, 230, 264, 266, 269 and 200.1 based on the search indicated in the application file of the above-noted parent application.

(D) Applicants submit that the following document is deemed most closely related to the subject matter encompassed by the claims of the present application. This document was cited in the Information Disclosure Statement filed in the present application on July 13, 2006.

Additionally, in view of 37 C.F.R. 1.98(a)(2)(ii) a copy of this U.S. Patent is not enclosed herewith. However, if a copy of this document is needed, the Examiner respectfully requested to contact the undersigned and a copy will be promptly provided for the Examiner's review and consideration. Nevertheless, although this document was previously cited to the Examiner it is included in the Information Disclosure Statement being filed concurrently herewith to complete the record. The document is:

U.S. Patent No. 6,029,125 titled "Reduced Sparseness Encoded Speech Signals" to HAGEN et al. which issued on February 22, 2000.

(E) Applicants herewith provide the following detailed discussion of the above-noted document, pointing out how the claimed subject matter is patentable over this document:

The present application, as herein amended, includes claims 2-16 of which claims 2, 7 and 12 are independent. Each of these claims recite features that Applicants submit are not anticipated, suggested or rendered obvious by the reference listed in paragraph (D), above.

The present invention is directed to a dispersed pulse vector generator used for a speech coder/decoder. The dispersed pulse vector generator includes a pulse vector generator configured to generate a pulse vector having a signed unit pulse and a dispersion pattern storage that is configured to store a plurality of fixed dispersion patterns. A dispersion pattern selector is configured to determine a selected dispersion pattern of the plurality of fixed dispersion patterns and a dispersed pulse vector generator is configured to generate a dispersed pulse vector by convoluting the pulse vector and the selected dispersion pattern. The dispersion pattern selector includes a first selector that pre-selects dispersion patterns of the plurality of fixed dispersion patterns and a second selector that determines the dispersion pattern, of the pre-selected dispersion patterns, to be convoluted with the pulse vector.

Applicants invention is further directed to method of generating a dispersed pulse vector used for a speech coder/decoder. The method comprises providing a pulse vector having a signed unit pulse, storing a plurality of fixed dispersion patterns, selecting a dispersion pattern of the plurality of fixed dispersion patterns, and generating a dispersed pulse vector by convoluting the pulse vector and selected dispersion

pattern. The selecting further comprises pre-selecting dispersion patterns of the plurality of fixed dispersion patterns and determining the dispersion pattern, of the pre-selected dispersion patterns, to be convoluted with the pulse vector.

The present invention is further directed toward a method of generating a dispersed pulse vector used for a speech coder/decoder. The method includes providing a pulse vector having a signed unit pulse, pre-selecting dispersion patterns of a plurality of stored fixed dispersion patterns, selecting one of the dispersion patterns of the pre-selected dispersion patterns and generating a dispersed pulse vector by convoluting the pulse vector and the selected dispersion pattern.

Applicants respectfully submit that at least the above-noted features recited in the various combinations of claims 2, 7 and 12 are not disclosed or suggested by the above-noted document either individually or in any proper combination with other documents of record in the present application.

U.S. Patent No. 6,029,125 (HAGEN et al.) discloses reducing sparseness in coded speech signals. In particular, this document discloses that sparseness is reduced in an input digital signal which includes a first sequence of sample values. An output digital signal is produced in response to the input digital signal. The output digital signal includes a second sequence of sample values. The second sequence of sample values has a greater density of non-zero sample values than the first sequence of sample values.

However, Applicants respectfully submit that this document does not disclose at least, in the claimed combination of claim 2, a first selector that pre-selects dispersion patterns of the plurality of fixed dispersion patterns and a second selector that

determines the dispersion pattern, of the pre-selected dispersion patterns, to be convoluted with the pulse vector.

Similarly, in terms of claim 7, the above-noted document does not disclose, in the claimed combination, pre-selecting dispersion patterns of the plurality of fixed dispersion patterns and determining the dispersion pattern, of the pre-selected dispersion patterns, to be convoluted with the pulse vector.

In terms of the combination recited in claim 12, the above-noted document does not disclose pre-selecting dispersion patterns of a plurality of stored fixed dispersion patterns and selecting one of the dispersion patterns of the pre-selected dispersion patterns.

Thus, Applicants respectfully submit that this document fails to disclose and or suggest the above-noted features recited in the various combinations set forth in Applicants independent claims 2, 7 and 12.

Further, with regard to dependent claims 3-6, 8-11 and 13-16, Applicants submit that they are allowable of at least because they depend from the respective independent claims, which Applicants submit have been shown to be allowable over the above-noted document, as well as based upon their own particular recitations.

In view of the above, Applicants submit that independent claims 2, 7 and 12 are not anticipated by any of the above-mentioned reference. Further, Applicants submit that the above-noted distinctions are such that a person having ordinary skill in the art at the time of Applicants' invention would not have been motivated to modify or combine the references of record herein in such a manner so as to result in, or otherwise, render

obvious, the present invention, as defined by claims 2-16. Accordingly, Applicants submit that claims 2-16 are allowable over the above-mentioned prior art reference.

Additionally, Applicants submit that the present Petition complies with all of the requirements (A) through (E) set forth in M.P.E.P. 708.02(VIII). Accordingly, Applicants respectfully request that this Petition to Make Special be granted and the examination of this application be accelerated.

Moreover, for at least the reasons set forth in (E), above, it is submitted that pending claims 2-16 of the present application are allowable over the prior art of record, and thus Applicants respectfully request an indication to such effect from the Examiner.

Should there be any questions or comments, the Examiner is respectfully requested to contact Applicant's representative at the below-listed telephone number in order to promptly resolve any such matters.

Respectfully submitted,
Kazutoshi YASUNAGA et al.

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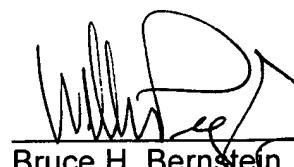
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